

WHAT IS CLAIMED IS:

1. A process of making a liquid ink comprising the steps of:

(a) dissolving a polymer comprising units derived from at least a nitrogen-containing polymerizable monomer in a solvent with a Kauri-Butanol number greater than 30 to form a polymer solution;

(b) dispersing colorant pigment particles in said polymer solution to form a colorant pigment dispersion;

(c) removing at least some of said solvent from said colorant pigment dispersion to form treated colorant pigment particles; and

(d) dispersing said treated colorant pigment particles in an organosol containing a carrier liquid having a Kauri-Butanol number less than 30.

2. The process of claim 1 wherein said nitrogen atom is present in a group selected from the group consisting of amide, amido, amino and amine group.

3. A process of making a liquid ink according to claim 1 wherein the dispersion resulting from step b) further comprises a charge director

4. A process of making a liquid ink according to claim 1 wherein said nitrogen-containing polymerizable monomer is selected from the group consisting of methacrylates or acrylates having aliphatic amino radicals, nitrogen containing heterocyclic vinyl monomers, N-vinyl substituted ring-like amide monomers, aromatic substituted ethylene monomers containing nitrogen radicals, and nitrogen-containing vinyl ether monomers.

5. A process of making a liquid ink according to claim 1 wherein the colorant pigment is carbon black.

6. A process of making a liquid ink comprising the steps of:

(a) dissolving a polymer comprising units derived from at least a nitrogen-containing polymerizable monomer in a solvent with a Kauri-Butanol number greater than 30 to form a polymer solution;

(b) dispersing colorant pigment particles in said polymer solution to form a colorant pigment dispersion;

(c) precipitating treated colorant pigment particles from said colorant pigment dispersion; and

5 (d) dispersing said treated colorant pigment particles in an organosol containing a carrier liquid having a Kauri-Butanol number less than 30.

7. The process of claim 6 wherein said nitrogen atom is present in a group selected from the group consisting of amide, amido, amino and amine group.

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8. A process of making a liquid ink according to claim 6 wherein the dispersion formed in step b) further comprises a charge director.

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9. A process of making a liquid ink according to claim 6 wherein said nitrogen-containing polymerizable monomer is selected from the group consisting of methacrylates or acrylates having aliphatic amino radicals, nitrogen containing heterocyclic vinyl monomers, N-vinyl substituted ring-like amide monomers, aromatic substituted ethylene monomers containing nitrogen radicals, and nitrogen-containing vinylether monomers.

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10. A process of making a liquid ink according to claim 6 wherein the colorant pigment is carbon black.

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11. A liquid ink comprising:

(a) a carrier liquid having a Kauri-Butanol number less than 30;

(b) an organosol; and

(c) colorant pigment particles surface-treated by a polymer comprising units derived from at least a nitrogen-containing polymerizable monomer.

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12. The liquid ink of claim 11 wherein the surface-treated particle is surface-treated by application of a coating or chemical modification of the surface.

13. A liquid ink according to claim 11 wherein said liquid ink further comprises a charge director.

14. A liquid ink according to claim 11 wherein said nitrogen-containing polymerizable
5 monomer is selected from the group consisting of methacrylates or acrylates having aliphatic amino radicals, nitrogen containing heterocyclic vinyl monomers, N-vinyl substituted ring-like amide monomers, aromatic substituted ethylene monomers containing nitrogen radicals, and nitrogen-containing vinylether monomers.

10 15. A liquid ink according to claim 11 wherein said polymer has a weight average molecular weight between 50,000 and 150,000 Daltons.

16. A liquid ink according to claim 11 wherein said colorant pigment is carbon black.

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